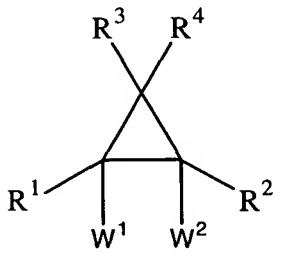
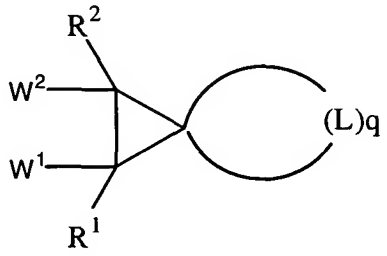
We Claim:

1. A method of stabilizing cyclopropene compounds by converting them to their cyclopropane analogs comprising covalently bonding to each carbon atom component of the double bond in the cyclopropene compound a moiety W1 and W2, respectively, wherein W1 and W2 are each selected from the group consisting of F, Cl, Br, I, alkoxy, acyloxy, alkoxycarbonyloxy, aminocarbonyloxy, alkylaminocarbonyloxy, dialkylaminocarbonyloxy, alkylsulfonyloxy and arylsulfonyloxy, with the proviso that at least one of W1 and W2 is Br or I.

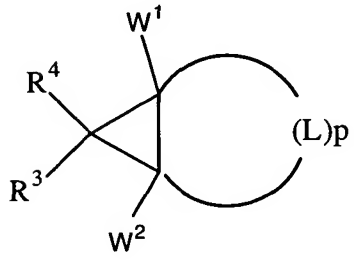
2. A cyclopropane compound comprising a structure selected from the group consisting of:



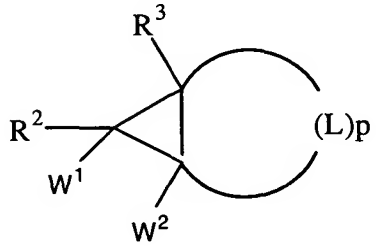
V



VI



VII



VIII

wherein:

a) each R^1, R^2, R^3, and R^4 is independently a group of the formula:

$$-(L)_n-Z$$

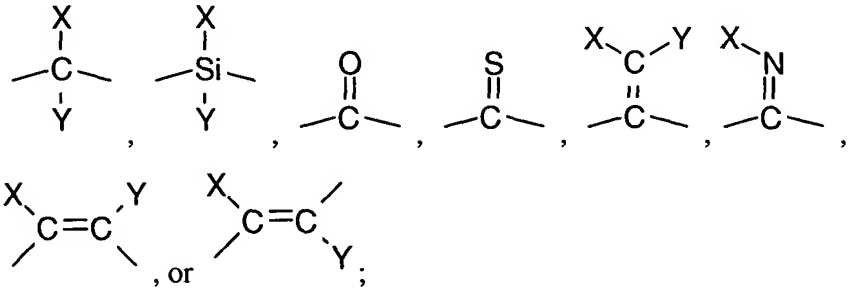
i) p is an integer from 3 to 10;

q is an integer from 4 to 11;

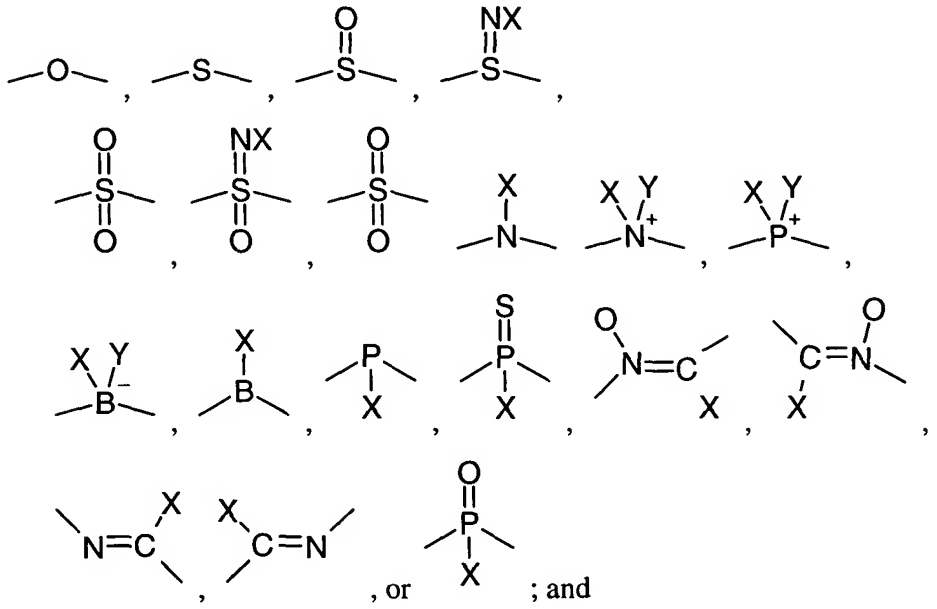
n is an integer from 0 to 12;

ii) each L is independently selected from a member of the group D, E, or J

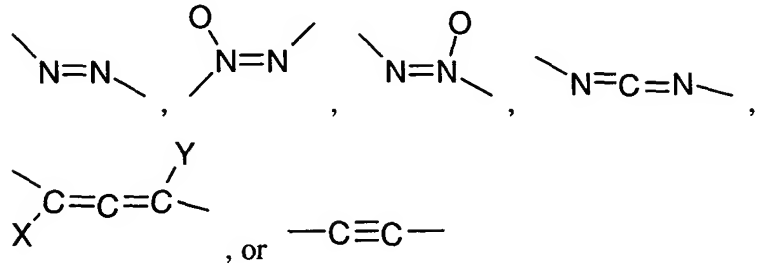
D is of the formula:



E is of the formula:



J is of the formula:



A) each X and Y is independently a group of the formula:

$$-(L)_m-Z;$$

and

B) m is an integer from 0 to 8; and

C) no more than two E groups are adjacent to each other and no J groups are adjacent to each other;

iii) each Z is independently selected from:

A) hydrogen, halo, cyano, nitro, nitroso, azido, chlorate, bromate, iodate, isocyanato, isocyanido, isothiocyanato, pentafluorothio, or

B) a group G, wherein G is an unsubstituted or substituted; unsaturated, partially saturated, or saturated; monocyclic, bicyclic, tricyclic, or fused; carbocyclic or heterocyclic ring system wherein;

1) when the ring system contains a 3 or 4 membered heterocyclic ring, the heterocyclic ring contains 1 heteroatom;

2) when the ring system contains a 5, or more, membered heterocyclic ring or a polycyclic heterocyclic ring, the heterocyclic or polycyclic heterocyclic ring contains from 1 to 4 heteroatoms;

3) each heteroatom is independently selected from N, O, and S;

4) the number of substituents is from 0 to 5 and each substituent is independently selected from X;

b) W^1 and W^2 are selected from F, Cl, Br, I, alkoxy, acyloxy, alkoxycarbonyloxy, aminocarbonyloxy, alkylaminocarbonyloxy, dialkylaminocarbonyloxy, alkylsulfonyloxy, and arylsulfonyloxy;

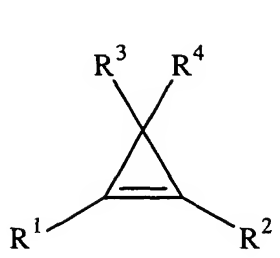
c) provided that at least one of W^1 and W^2 is I; and

d) the total number of non-hydrogen atoms is 50 or less.

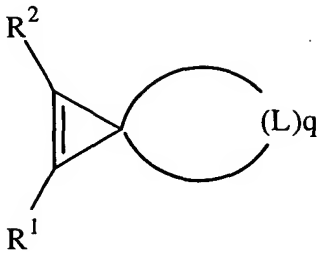
3. The compound of claim 2 wherein each of W1 and W2 are I.

4. The compound 1,2-diiodo-1-methylcyclopropane.

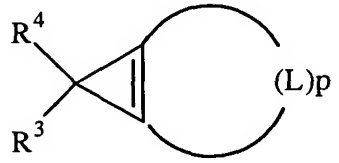
5. A process to generate a compound of structure I, II, III or IV



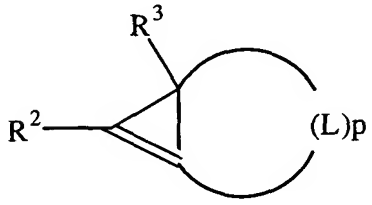
I



II



III



IV

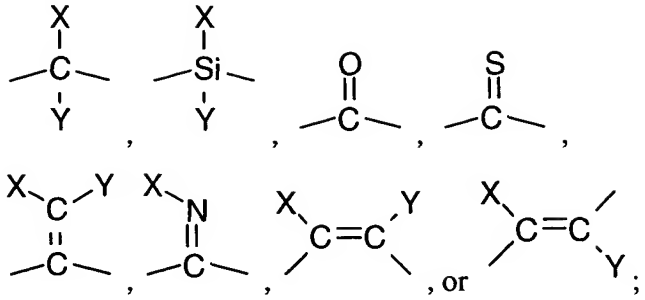
comprising contacting a compound of structure V, VI, VII or VIII of claim 2, with a reducing or nucleophilic agent to convert the compound of structure V, VI, VII or VIII into its respective analogous compound of structure I, II, III or IV, respectively, wherein:

a) each R^1, R^2, R^3, and R^4 is independently a group of the formula:

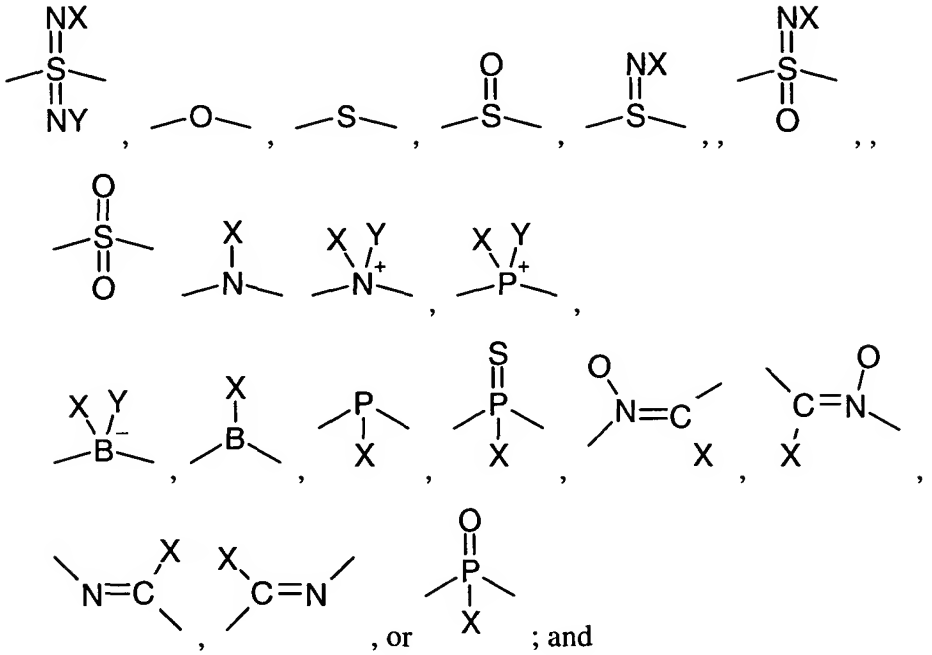
$$-(L)_n-Z$$

i) p is an integer from 3 to 10;
q is an integer from 4 to 11;
n is an integer from 0 to 12;

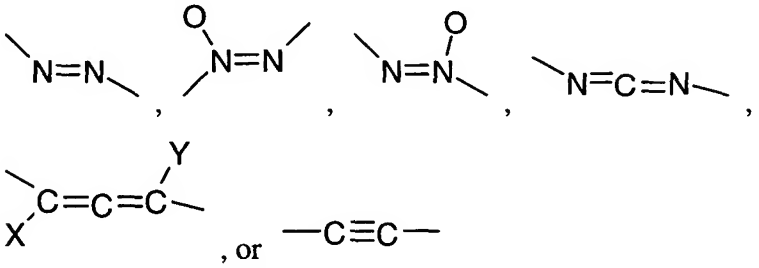
ii) each L is independently selected from a member of the group D, E, or J :
D is of the formula:



E is of the formula:



J is of the formula:



A) each X and Y is independently a group of the formula:

$$-(L)_m-Z;$$

and

B) m is an integer from 0 to 8; and

C) no more than two E groups are adjacent to each other and no J groups are adjacent to each other;

iii) each Z is independently selected from:

A) hydrogen, halo, cyano, nitro, nitroso, azido, chlorate, bromate, iodate, isocyanato, isocyanido, isothiocyanato, pentafluorothio, or

B) a group G, wherein G is an unsubstituted or substituted; unsaturated, partially saturated, or saturated; monocyclic, bicyclic, tricyclic, or fused; carbocyclic or heterocyclic ring system wherein;

1) when the ring system contains a 3 or 4 membered heterocyclic ring, the heterocyclic ring contains 1 heteroatom;

2) W^1 and W^2 are selected from F, Cl, Br, I, alkoxy, acyloxy, alkoxycarbonyloxy, aminocarbonyloxy, alkylaminocarbonyloxy, dialkylaminocarbonyloxy, alkylsulfonyloxy, and arylsulfonyloxy;

c) provided that at least one of W^1 and W^2 is a Br or I; and

d) the total number of non-hydrogen atoms is 50 or less.

6. The method of claim 5 wherein the reducing agent is selected from the group consisting of metals, organometallic reagents and low valent metal ions.

7. The method of claim 5 wherein the nucleophilic agent is selected from the group consisting of mercaptans, selenides, phosphines, phosphites, Na2S, Na2Te, Na2S2O4, diethylphosphite sodium salt, KSCN, NaSeCN, thiourea, diphenyltelurium and NaI.

8. A method of using any one of a compound of structure V, VI VII and VIII of claim 2 as a plant ethylene response antagonist by contacting the plant with said compound.